Fig. 1

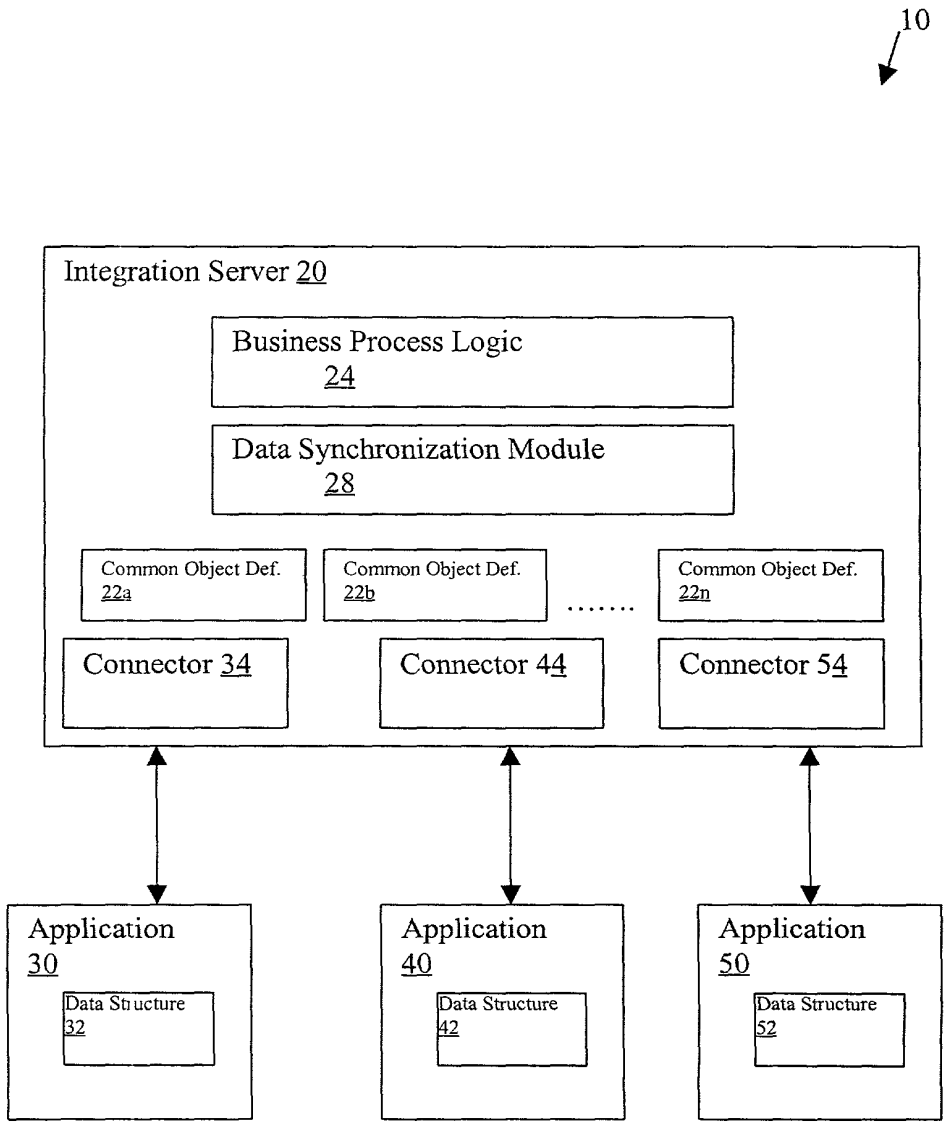

10
Integration Server 20
Business Process Logic
24
Data Synchronization Module
28
Common Object Def.
22a
Common Object Def.
22b
.....
Common Object Def.
22n
Connector 34
Connector 44
Connector 54
Application
30
Data Structure
32
Application
40
Data Structure
42
Application
50
Data Structure
52

Fig. 2

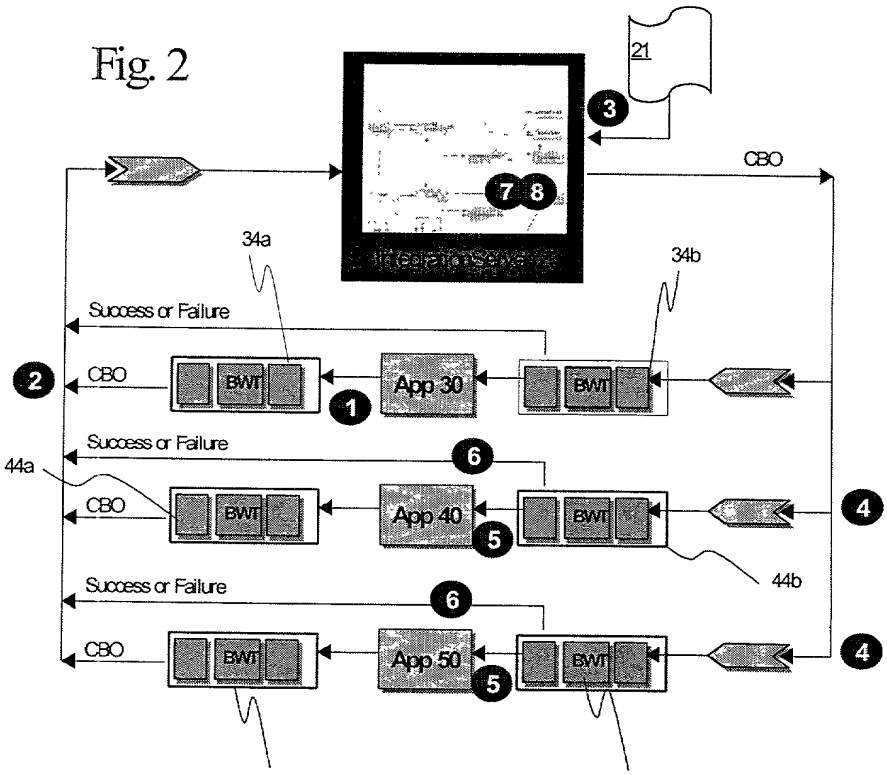

21
3
CBO
7
8
34a
34b
Success or Failure
2
CBO
BWT
App 30
BWT
1
Success or Failure
6
44a
CBO
BWT
App 40
BWT
4
5
44b
Success or Failure
6
CBO
BWT
App 50
BWT
4
5

Fig. 3

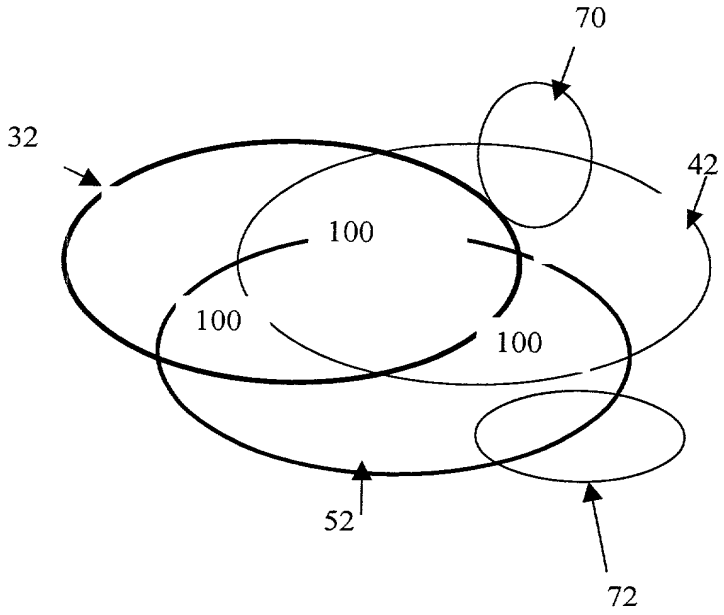


Fig. 4

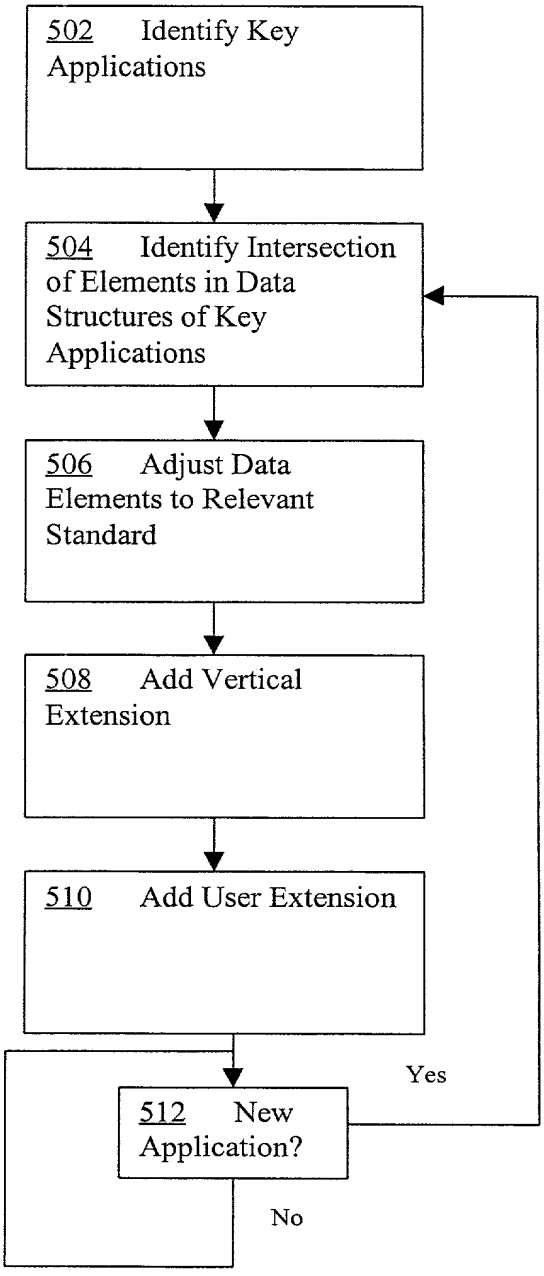
```
<!ENTITY % FIELDS SYSTEM "Common_Inventory_fields.dtd">
%FIELDS;

<!ENTITY % USERDEFINED SYSTEM "Custom_Inventory.dtd">
%USERDEFINED;

<!ENTITY % VERTICAL SYSTEM "Vertical_Inventory.dtd">
%VERTICAL;

<!ELEMENT Inventory (
      Id?, DestinationAvailability?, DestinationInvID?, DestinationInventory?,
      DestinationStatus?, DestinationStorageLocation?, DestinationBatch?,
      PartMovementOrderID?, ProductID?, Quantity?, SourceAvailability?,
      SourceInvID?, SourceInventory?, SourceStatus?, SourceStrorageLocation?,
      SourceBatch?, TransactionDate?, TransactionNumber?, TransactionType?,
      UOM?, ListOfAssets*, UserDefined, Vertical)>

<!ELEMENT ListOfAssets (
      AssetID?, AssetNumber?, InventoryTransactionID?, ProductID?, SerialNumber?)*>

Custom_Inventory.dtd
<!ELEMENT UserDefined (Description, FIELD1, ARRAY1*)>

<!ELEMENT ARRAY1 (FIELD2, FIELD3)>
<!ELEMENT FIELD1 (#PCDATA)>
<!ELEMENT FIELD2 (#PCDATA)>
<!ELEMENT FIELD3 (#PCDATA)>

Vertical_Inventory.dtd
<!ELEMENT Vertical (Description, VFIELD1, VARRAY1*)>

<!ELEMENT VARRAY1 (VFIELD2, VFIELD3)>
<!ELEMENT VFIELD1 (#PCDATA)>
<!ELEMENT VFIELD2 (#PCDATA)>
<!ELEMENT VFIELD3 (#PCDATA)>

Common_Inventory_fields.dtd
<!ELEMENT AssetID (#PCDATA)>
<!ELEMENT AssetNumber (#PCDATA)>
<!ELEMENT InventoryTransactionID (#PCDATA)>
<!ELEMENT SerialNumber (#PCDATA)>
<!ELEMENT ProductID (#PCDATA)>
<!ELEMENT Id (#PCDATA)>
<!ELEMENT DestinationAvailability (#PCDATA)>
<!ELEMENT DestinationInvID (#PCDATA)>
<!ELEMENT DestinationInventory (#PCDATA)>
<!ELEMENT DestinationStatus (#PCDATA)>
<!ELEMENT DestinationStorageLocation (#PCDATA)>
<!ELEMENT DestinationBatch (#PCDATA)>
<!ELEMENT PartMovementOrderID (#PCDATA)>
<!ELEMENT Quantity (#PCDATA)>
<!ELEMENT SourceAvailability (#PCDATA)>
<!ELEMENT SourceInvID (#PCDATA)>
<!ELEMENT SourceInventory (#PCDATA)>
<!ELEMENT SourceStatus (#PCDATA)>
<!ELEMENT SourceStrorageLocation (#PCDATA)>
<!ELEMENT SourceBatch (#PCDATA)>
<!ELEMENT TransactionDate (#PCDATA)>
<!ELEMENT TransactionNumber (#PCDATA)>
<!ELEMENT TransactionType (#PCDATA)>
<!ELEMENT UOM (#PCDATA)>
<!ELEMENT Description (#PCDATA)>
```

70

72

100

Fig. 5


502 Identify Key Applications
504 Identify Intersection of Elements in Data Structures of Key Applications
506 Adjust Data Elements to Relevant Standard
508 Add Vertical Extension
510 Add User Extension
512 New Application?
Yes
No

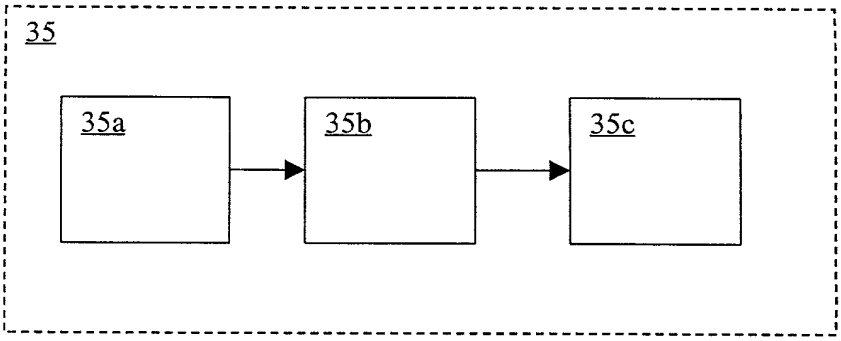



Fig. 6